

AEROSPACE BADGE

Activity 8: Space Flight Spinoffs

The science and technology used in exploring space have many applications here on Earth. Find out about one of the following. If possible, try the product or talk to someone who uses it in her life.

- Dehydrated Food – food, from which water has been removed, first developed for astronauts.
- The Infrared Thermometer- an ear thermometer that uses the technology developed by scientists to measure the temperatures of stars and planets.
- An Advanced Heart Pacemaker – a miniature device designed to keep a human heart beating, uses long-life batteries developed for space flight.

Resources in Kit

☆ Book: *Spinoff 2000*

☆ Book: *Space Food and Nutrition: An Educator's Guide*

In This Section

- ➔ Spinoffs activity from NASA Glenn Research Center, 2001.
- ➔ Food for Space Flight activity from NASA Johnson Space Center

Suggestions

- ☆ Do the NASA Spinoff Activity in this section with the troop/group. This is a great way to get the girls' attention.
- ☆ Read through the NASA Spinoff book included in this kit. Have groups of 2-3 girls read and become "experts" on a specific Spinoff. Each group can draw a poster and a make short presentation to the rest of the troop/group.

Above and Beyond

- ☆ Hold a taste test like the astronauts do. Buy some of the items listed in the "Food for Space Flight Appendix." Pass

around a bite of each food to the girls, and then have them rank the food on their survey sheet. Each girl could each create her own menu for a "space campout."
(Remember that there is no refrigerator or freezer in a Space Shuttle.)

- ☆ Have the girls make pudding in zipper baggies using instant pudding, powdered milk, and water. Experiment with the order of adding ingredients in the baggie. Discuss the different results.
- ☆ Invite a speaker from the NASA Speaker's Bureau to come out with the Space Food Tray. At NASA Glenn Research Center, call (216) 433-2003. Be sure to call two months in advance.

Web Resources (on yellow paper)

- ☆ <http://spacelink.nasa.gov/Instructional.Materials/On-line.Educational.Activities/Menu/index.html>

Plan the perfect space menu, take the galley tour, and find out about the most requested astronaut foods. This is a fun site.

- ☆ <http://www.ag.iastate.edu/centers/ftcsc/pages/proddev.htm>

The department that produces the food for the astronauts lists menus and nutritional information.

- ☆ <http://www.jsc.nasa.gov/pao/spinoffs/mealsys.html>

Find out how NASA space food technology is being used with the elderly.